UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Rey 1459

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

9629 7590 06/23/2008 MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON. DC 20004 EXAMINER
OH, TAYLOR V

ART UNIT PAPER NUMBER
1605

DATE MAILED: 06/23/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,164	07/25/2005	Hermanus Carolus Catherina Karel Bakel Van	101384-1 US	2743
TITLE OF INVENTION: P	ROCESS FOR THE PREPA	RATION OF DIOXANE ACETIC ACID ESTERS		

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	09/23/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	or trans ig the F ierwise	atent, advance or in Block 1, by (a	ders and notification of a) specifying a new corr	maintenance fees v espondence address	vill be ; and/o	mailed to the current r (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPOND	ENCE ADDRESS (Note: Use Bi	ock 1 for a	my change of address)	No Fe pa ha	ote: A certificate of e(s) Transmittal. Th pers. Each additions we its own certificate	mailin is certi il paper e of ma	g can only be used for ficate cannot be used for tr, such as an assignme illing or transmission.	r domestic mailings of the or any other accompanying nt or formal drawing, must
	7590 0623 WIS & BOCKIUS VANIA AVENUE I, DC 20004	LLP			Cer	tificat	e of Mailing or Trans	
								(Depositor's name)
				L				(Signature)
				L				(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTO	R	ATTC	DRNEY DOCKET NO.	CONFIRMATION NO.
10/518,164 TITLE OF INVENTION	07/25/2005 F: PROCESS FOR THE I	PREPAI		s Carolus Catherina Kare XANE ACETIC ACID I			101384-1 US	2743
APPLN, TYPE	SMALL ENTITY	ISS	UE FEE DUE	PUBLICATION FEE DUI	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1440	\$300	\$0	\$0 \$1740		09/23/2008
EXAM	IINER		ART UNIT	CLASS-SUBCLASS	7			
OH, TA	YLOR V		I625	549-375000	_			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 8/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATZ less an assignce is ident h in 37 CFR 3.11. Comp	nge of C " Indica ed. Use	Correspondence tion form of a Customer  E PRINTED ON T		to 3 registered pater tively, gle firm (having as a agent) and the nam torneys or agents. If e printed. type) patent. If an assign assignment.	nt attorn n memb nes of u no nan	per a 2pp to a 3	ocument has been filed for
Please check the appropr	iate assignee category or	categor	ies (will not be pr	inted on the patent):	Individual 🗆 C	orporat	ion or other private gro	oup entity Government
Advance Order -	wo small entity discount p		d)	o. Payment of Fee(s): (Pl A check is enclosed Payment by credit c The Director is herel overpayment, to De	ard. Form PTO-2038	is att	ached.	shown above) ficiency, or credit any n extra copy of this form).
- 11	s SMALL ENTITY state	is. See 3	7 CFR 1.27.	☐ b. Applicant is no lo				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) w tes Pate	rill not be accepted nt and Trademark	from anyone other than Office.	the applicant; a reg	istered	attorney or agent; or th	ne assignee or other party in
Authorized Signature					Date			
Typed or printed nam					Registration N			
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	FR 1.3: U.S.C. USPTO rden, sh O NOT S	11. The informatic 122 and 37 CFR D. Time will vary ould be sent to the SEND FEES OR O	on is required to obtain on 1.14. This collection is endepending upon the induction of financial of the complex tention of the complex TED FORMS.	retain a benefit by stimated to take 12 ividual case. Any co cer, U.S. Patent and IO THIS ADDRES:	the pub minute ommen Trader S. SEN	lic which is to file (and s to complete, including ts on the amount of times ark Office, U.S. Dep D TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



## UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

288: COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virgima 22313-1450 www.uspio.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/518,164 07/25/2005		Hermanus Carolus Catherina Karel Bakel Van	101384-1 US	2743	
9629	7590 06/23/2008		EXAM	IINER	
MORGAN LEV	VIS & BOCKIUS LL	OH, TAYLOR V			
	VANIA AVENUE NW		ART UNIT	PAPER NUMBER	
WASHINGTON,	DC 20004	1625			
			DATE MAILED: 06/23/2008		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

#### Application No. Applicant(s) 10/518,164 BAKEL VAN ET AL. Notice of Allowability Examiner Art Unit Taylor Victor Oh 1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

- of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
- This communication is responsive to 5/09/2008.
- 2. The allowed claim(s) is/are 1-11.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - b) ☐ Some\* c) ☐ None of the:
    - 1. T Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No.
      - 3. X Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. T Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

### Reasons of Allowance

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5//09/08 has been entered.

#### The Status of Claims

Claims 1-11 are pending.

Claims 1-11 are allowed.

- I. The following is an examiner's statement of reasons for allowance:
  - The rejection of Claims 1-11 under 35 U.S.C. 103(a) as being unpatentable over Kooistra et al (WO 02/06266 A1) has been withdrawn due to the unexpected result on the Declaration filed on 5/09/2008

Application/Control Number: 10/518,164

Art Unit: 1625

Kooistra et al discloses the process for preparing 2-(6-substituted-1,3-dioxane-4-yl) acetic acid by reacting an acid chloride with an alcohol in the presence of triethylamine.

However, the instant invention differs from the prior art in that claim 1 recites contacting the generated acid chloride with an alcohol in the presence of N-methylmorpholine; furthermore, there is the unexpected result for using N-methylmorpholine in comparison with triethylamine as shown below the table:

Oxalyl chloride	Conc	Temp	Dose time	Amount base	Amount tert- BuOH	dipped dosing	Yield with Et <sub>3</sub> N	Yield with NMM
eq	m-%	°C	hour	eq	eq	Y/N	moi%	mol%
1.2	10	10	1	5.0	20	N	60.6	85.1
1.2	10	10	1	2.5	20	N	68.1	94.7
1.6	10	10	1	5.0	20	N	86.8	101.6
1.6	10	10	1	2.5	20	N	88.9	98.0
1.4	16	15-20	1	2.0	13	N	89.0	97.3
1,4	16	15-20	1	2.0	13	Y	89.5	93.0

Therefore, it would have been unobvious to the skilled artisan in the art using the claimed N-methylmorpholine in the prior art process.

Application/Control Number: 10/518,164

Art Unit: 1625

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning the communication after allowance such as sending all post-allowance correspondence should be directed to "Box Issue Fee" or faxed directly to PUBS at 703-305-8755. This will expedite the process of these papers.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Taylor Victor Oh/
Primary Examiner, Art Unit 1625
6/16/08

Art Unit: 1625